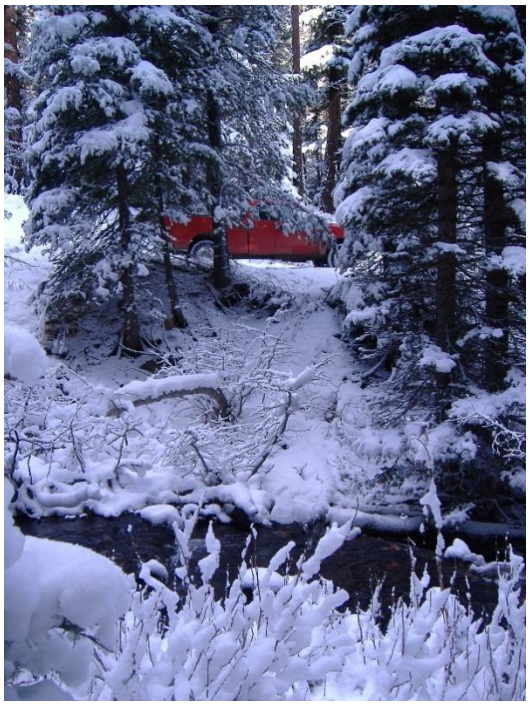

Final Environmental Assessment
NF Ahtanum (A3000) Road Relocation
Ahtanum State Forest, Yakima County, Washington
FEMA-1734-DR-WA (Public Assistance)

March 31, 2011

U.S. Department of Homeland Security
Federal Emergency Management Agency-Region X
130 228th Street Southwest
Bothell, Washington 98201-9796

Photos: NF Ahtanum (A3000) Road and NF Ahtanum Creek (Left photo: roll dip to creek. Right photo: undermining of road)

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TERMS USED IN THIS DOCUMENT

Area of Potential Effect (APE) – the geographic area within which an undertaking may cause changes in the character or use of historic properties, if such properties exist. The APE is influenced by the scale and nature of the undertaking.

Alternate Project – if an applicant determines that the public welfare would not be best served by restoring a damaged facility or its function using FEMA funds, the applicant may apply to FEMA to use eligible disaster funds for other purposes (i.e. Alternate Projects). Examples of Alternate Projects include repair or expansion of other public facilities, purchase of capital equipment, or construction of new public facilities.

Best Management Practices (BMPs) – environmental protection practices applied to help ensure that projects are conducted in an environmentally responsible manner.

Channel Migration Zone (CMZ) – the area where the active channel of a stream is prone to move and this results in a potential near-term loss of riparian function and associated habitat adjacent to the stream, except as modified by a permanent levee or dike. For this purpose, near-term means the time scale required to grow a mature forest (DNR Forest Practices Board Manual).

Critical Habitat – under the Endangered Species Act, Critical Habitat is defined as specific areas within the geographical area occupied by the species at the time of listing, if they contain physical or biological features essential to conservation, and those features may require special management considerations or protection. Critical Habitat may also be designated in specific areas outside the geographical area occupied by the species if the listing agency determines that the area itself is essential for conservation. Not all geographic areas occupied by listed species are designated as Critical Habitat.

Floodplain – the lowland and relatively flat areas adjoining inland and coastal waters including, at a minimum, that area subject to a one percent or greater chance of flooding in any given year (FEMA).

Grade Sags – low points on the road profile where runoff collects. Grade sags are strategically placed to divert road surface runoff at key locations so the runoff can be diverted onto the forest floor and not cause sedimentation.

Green Dot System – identifies roads open to the public for vehicular and ORV (motorcycles, all terrain vehicles, 4x4s) use. Management of the green dot road system includes a cooperative agreement among DNR and other public and private landowners that allows public access to state lands through and across private ownerships. Maps, reader boards, and route markers with green dots indicate when a road is open to motorized use.

Nonattainment Area – the geographic area designated by EPA as exceeding an air quality standard for a limited list of pollutants (e.g. particulate matter, nitrogen oxides, sulfur dioxide, ozone, lead, and carbon monoxide).

Roll Dips - a low point where road surface runoff is diverted off the road surface, similar to drivable waterbars.

Stream Adjacent Parallel (SAP) – roads in a riparian management zone on property that has an alignment that is parallel to the general alignment of the stream, including roads by others under easements or cooperative road agreements. Also included are stream crossings where the alignment of the road continues to parallel the stream for more than 250 feet on either side of the

stream. Not included are federal, state, county or municipal roads that are not subject to DNR forest practices rules, or roads of another adjacent landowner (Chapter 222-16 of the Forest Board Manual from Washington State Forest Practices).

Timber Fish & Wildlife – an organization of representatives of agencies regarding the Timber, Fish & Wildlife (TFW) agreement, comprised of DNR Forest Practices, Washington State Department of Fish & Wildlife (WDFW), Washington State Department of Ecology (Ecology), and affected tribes. The agencies work together regarding timber interests and activities in a manner that complies with environmental and regulatory requirements.

Waterbar – a road construction feature that is used to prevent erosion on roads by reducing flow length. It is usually a diagonal channel across the road surface that diverts surface water into a drainage. Without waterbars, water would flow down the entire length of the road, gaining velocity. By constructing a series of waterbars at intervals along a road, the volume of erosive water flowing down the road is reduced.

ACRONYMS USED IN THIS DOCUMENT

APE	Area of Potential Effect
AID	Ahtanum Irrigation District
ATV	all-terrain vehicle
BMP	best management practice
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
cfs	cubic feet per second
DAHP	(Washington State) Department of Archaeological and Historic Preservation
DBH	diameter at breast height
DNR	(Washington State) Department of Natural Resources
EA	environmental assessment
Ecology	(Washington State) Department of Ecology
EFH	essential fish habitat
EIS	environmental impact statement
EO	(Presidential) Executive Order
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
FPA	Forest Practices Application
FPR	(DNR) Forest Practices Rules
HCP	Habitat Conservation Plan
HPA	Hydraulic Project Approval
MBTA	Migratory Bird Treaty Act
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NRHP	National Register of Historic Places
ORV	off road vehicle
REO	(FEMA) Regional Environmental Officer

ACRONYMS USED IN THIS DOCUMENT

RMAP	(DNR) Road Maintenance and Abandonment Plan
RMZ	Riparian Management Zone
SAP	Stream Adjacent Parallel
SHPO	State Historic Preservation Officer
TFW	Timber Fish & Wildlife (group of agency representatives)
USFS	U.S. Forest Service
USGS	U.S. Geological Survey
USFWS	U.S. Fish and Wildlife Service
WDFW	Washington Department of Fish & Wildlife
WM	Willamette Meridian
WNHP	Washington Natural Heritage Program
WRIA	Water Resource Inventory Area

SECTION 1 Introduction

The Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1973 (Stafford Act), as amended, provides federal assistance programs for both public and private losses sustained in disasters. FEMA provides assistance to private citizens, public entities, and non-profit groups following declared disasters. The Washington State Department of Natural Resources (DNR) applied, through the Washington State Emergency Management Division (EMD), to the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) for Public Assistance funding for an Alternate Project to relocate a segment of road that is designated by DNR as stream adjacent parallel (SAP) on the North Fork (NF) Ahtanum (A3000) Road. Road relocation consists of abandoning the SAP segment of road and re-routing traffic to another existing road, A3600. The project is located in the Ahtanum State Forest, which is approximately 30 miles west of Yakima, in Section 14 of Township 12 North, Range 13 East, W.M., in Yakima County (see Figure 1, Site Location Map). Because the Proposed Action parallels segments of Shellneck and NF Ahtanum Creeks, some project-related studies also refer to Shellneck Creek.

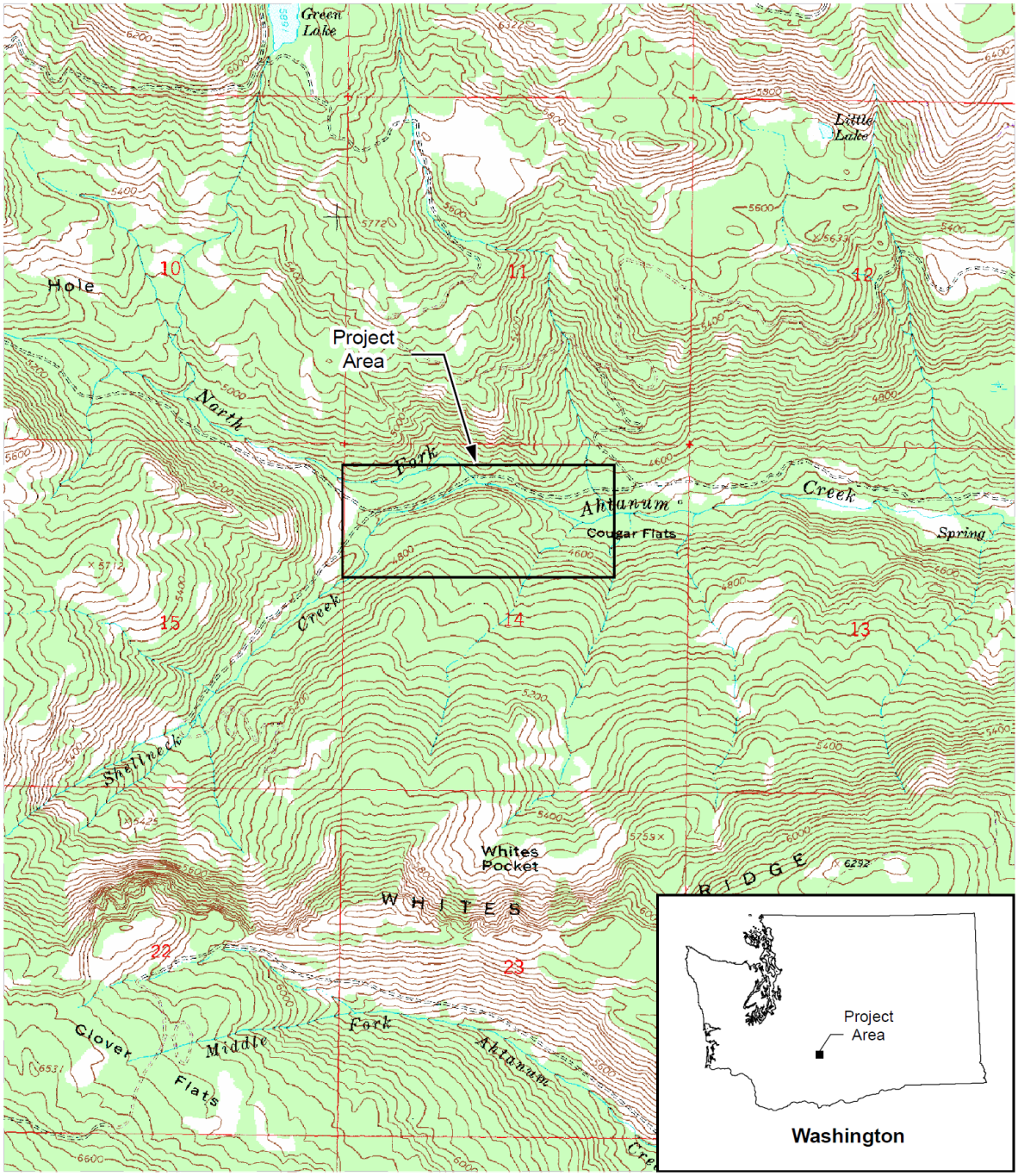
The National Environmental Policy Act (NEPA) of 1969 and the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations [CFR] Part 1500 through 1508) direct FEMA and other federal agencies to take into consideration the environmental consequences of proposed federally funded projects. In compliance with NEPA and its implementing regulations, FEMA prepared this environmental assessment (EA) to analyze potential environmental impacts of the Proposed Action and other reasonable alternatives that would meet the purpose, need, and objectives of the project as well as a No Action Alternative. The No Action Alternative also serves as an environmental baseline against which the other alternatives can be compared.

FEMA used the findings in the Draft EA and public input to determine that the project would not significantly affect the quality of the human and natural environment. Therefore, FEMA has made a Finding of No Significant Impact (FONSI) and determined that an environmental impact statement (EIS) is not necessary.

FIGURE 1 - SITE LOCATION MAP

PROJECT NAME: North Fork Ahtanum Road Relocation
LEGAL DESCRIPTION: S14 T12N R13E, W.M.

REGION: Southeast
COUNTY: Yakima



Source: USGS 24K Topographic Map, Darland Mountain, Washington

0 0.5 1 2 Miles

Approximate Scale in Miles

Prepared By: J. Mattson Creation Date: September 23, 2010 Modification Date: Not defined.

The CEQ and FEMA regulations (44 CFR Section 10) that implement NEPA require NEPA documents to be concise, focus on the issues relevant to the project, and exclude extraneous background data and discussion of subjects that are not relevant or would not be affected by the project alternatives. Accordingly, the following subjects are not evaluated in detail for the following reasons:

Subject	**Analysis**
Air Quality	The project is not in a nonattainment area, is located in a state forest, and is remote and undeveloped. Construction would create dust and vehicle and equipment emissions; however, impacts would be minor and temporary. Air quality impact associated with traffic is not expected to increase above current levels. Long-term dust-related air quality impacts would be reduced by the net reduction of 3,015 feet of roadway.
Noise	The project area does not have sensitive noise receptors. There is existing background noise from commercial logging, vehicular, and recreational activities. Project construction activities (described on page 3-4) would result in noise, which would be temporary, lasting approximately 4 weeks. Noise associated with traffic is not expected to increase above current levels.
Land Use and Socioeconomics	Land use and socioeconomic impacts are not expected to result from relocating the SAP segment of NF Ahtanum (A3000) Road by re-routing traffic to A3600 Road because A3600 Road would connect with A3000 Road via a new bridge, and provides access to the same areas as the existing route. Abandonment of the SAP segment will not result in or create changes to the land use for the area. (See Figure 2).
Traffic	Traffic is not expected to increase above current levels as a result of relocating the SAP segment of NF Ahtanum (A3000) Road to A3600 Road. Access to the upper end of the NF Ahtanum drainage, the Blue Lake area and the north side of Darland Mountain will continue to be available to the public with little change in travel time by using the new route.
Visual Quality	With any of the action alternatives, relocation of NF Ahtanum (A3000) Road includes various combinations of use of existing roads and clearing of vegetation. The visual impacts would be the result of removal of trees for 855 feet of newly constructed road. The proposed project would result in a net decrease of 3,015 feet of roadway, and abandoned road segments will become revegetated with time, resulting in a net increase of 2.8 acres of forest. In addition, there are no designated visual resource areas that would be affected by the project.

2.1 PURPOSE AND NEED

The purpose of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1973 (Stafford Act), as amended, is to provide a wide range of federal assistance for states and local governments significantly impacted by disasters or emergencies or both. The purpose of the Federal Emergency Management Agency's (FEMA) Public Assistance (PA) Grant Program is to provide assistance to State, Tribal and local governments, and certain types of Private Nonprofit organizations so that communities can quickly respond to and recover from major disasters or emergencies declared by the President. Through the PA Program, FEMA provides supplemental Federal disaster grant assistance for debris removal, emergency protective measures, and the repair, restoration, reconstruction, or replacement of disaster-damaged or destroyed publicly owned facilities and the facilities of certain Private Non-Profit (PNP) organizations. The need for the FEMA action is to provide funds to Washington State Department of Natural Resources (DNR) to relocate a segment of the North Fork (NF) Ahtanum (A3000) Road in accordance with DNR's Forest Practices program. The Proposed Action qualifies for funding as an alternate project under the PA Program.

The Ahtanum State Forest encompasses an area of approximately 76,000 acres and draws thousands of visitors each year. The NF Ahtanum (A3000) Road is a major road in the Ahtanum State Forest and provides access to the upper end of the NF Ahtanum drainage, which includes the Blue Lake area and the north side of Darland Mountain. This road is used for forest management practices and is also part of the Green Dot System that allows motorized public use on designated roads. Ownership in this area consists of three DNR parcels, two Ahtanum Irrigation District (AID) parcels, and one United States Forest Service (USFS) parcel. Various easements exist between AID and DNR across each other's ownership. The USFS does not have easements across either AID or DNR land. This area is used for grazing and for commercial forest in which harvest operations have taken place over the last 60-plus years. The area has heavy year-round dispersed recreation, which includes hunting, fishing, biking, wheeled vehicular use (motorcycles, ATVs, 4x4s), equestrian use, cross-country skiing, and snowmobiling. The proposed road relocation project is entirely within DNR land ownership.

As part of the DNR's Road Maintenance and Abandonment Plan (RMAP), which is administered under DNR's Forest Practices program, an approximately 3,720 foot-long segment of the NF Ahtanum (A3000) Road has been identified as being stream adjacent parallel (SAP) with a high potential for sediment delivery. The DNR's goal is to reduce the amount of SAP roads. This segment of road is located in Section 14 of Township 12 North, Range 13 East, W.M., west of Snow Cabins Campground to approximately the west section line of Section 14 (see Figure 2). The SAP segment of road has native (dirt) surfacing and parallels Shellneck and NF Ahtanum Creeks (the confluence of Shellneck and NF Ahtanum Creeks is approximately mid-way along the SAP segment of road at bridge YR-9). The creeks are considered to be excellent bull trout habitat. The road and creeks are in the bottom of a ravine. Bull trout is listed as a threatened

species under the Endangered Species Act. The SAP road segment is difficult to maintain because of its proximity to the creeks. Sediment from the road enters the creeks, and over time, part of the road has become undermined and has high probability of being washed out in the near future causing significant sediment delivery to Shellneck and NF Ahtanum Creeks.

2.2 PROJECT OBJECTIVES

The CEQ regulations require reasonable alternatives be identified, evaluated, and compared. Reasonable alternatives are alternative ways of meeting project objectives, but with varying degrees of environmental impact. Alternatives that would clearly result in substantially greater environmental impact than the Preferred Alternative do not require detailed analysis. The following project objectives have been identified:

1. Provide safe, secure, and permanent access for commercial and recreational users,
2. Reduce the amount of Stream Adjacent Parallel (SAP) roads,
3. Avoid unstable areas, steep slopes, and steep road grades (grades over 15%),
4. Minimize length of road (thus, minimizing construction-related environmental impacts),
5. Minimize annual maintenance construction related impacts,
6. Minimize impacts to bull trout, and
7. Minimize public safety issues/emergency response time.

This section discusses the alternatives considered in this EA: (1) the No Action Alternative, (2) the Preferred Alternative (or Proposed Action) toward which FEMA would contribute funding, and (3) Other Alternatives Considered, but not carried forward in the analysis. A table at the end of Section 3 summarizes and compares the impacts of each alternative and the extent to which the alternatives meet the project objectives.

Figure 2 is a map showing the alternative routes, and bridge and gate locations.

Under all of the action alternatives, abandonment of the NF Ahtanum (A3000) Road would be in accordance with DNR's road abandonment procedures, and consist of removing two existing culverts and one bridge (YR-9), (except the YR-9 bridge and culverts would remain under Alternative 4), pulling back fill slopes, constructing earth barricades and undrivable waterbars, light ripping of the road surface, placement of wood debris and rocks on the road surface, replanting native vegetation where feasible, and grass seeding. Abandonment of a 150-foot section of A3006 at its junction with A3000 to the crossing with the new construction includes an earth barricade, ripping of the road surface and scattering wood debris on the road surface. Two existing gates (Gate 1 at the east line of Section 14 and Gate 2 west of Snow Cabins Campground) would be used to control public access and direct traffic to another existing route (A3600 Road). Gate 1 is currently closed but would be opened after construction of the new route to allow access to A3600 Road. Gate 2 is open most of the time and is closed seasonally when necessary to prevent access west of the gate to the upper reaches of the NF Ahtanum drainage. Gate 2 would be closed after abandonment of the NF Ahtanum (A3000) Road.

All alternatives except for the No Action Alternative would require an easement transfer for the Ahtanum Irrigation District (AID). The AID manages their lands to provide water supply for users within their irrigation district. The AID is also a large forest landowner that conducts harvest operations. These harvest activities are for stand management related to water supply and for income generation. The AID currently has an easement on the NF Ahtanum (A3000) Road.

3.1 ALTERNATIVE 1 – NO ACTION

The No Action Alternative serves to provide a baseline of existing conditions and current impacts to resources in the project area, and is used to compare and contrast the impacts to resources of the other alternatives.

The public uses the NF Ahtanum (A3000) Road year-round. The DNR Recreation Department estimates that from May to mid-December of 2008, 4,097 vehicles used the road, and from May to November of 2009, 3,208 vehicles (including four-wheeled vehicles, off-road vehicles and motorcycles) used the road. In the winter of 2008 to 2009 (December to March), 990 snowmobiles used the road. In 2009 to 2010 (December to March) 1,118 snowmobiles used the

road. Erosion and sedimentation is greatest during the wet season (early spring and late fall), when vehicles on the SAP segment of the road cause disturbance to the native (dirt) surface road, which then causes sediment to be easily transported to Shellneck and NF Ahtanum Creeks. During the spring, much of the vehicle use is from individuals trying to drive through the snow and wet conditions to reach Darland Mountain. In the fall, much of the use is from hunters, primarily for elk hunting. Trying to discourage use of this road segment during these periods is extremely difficult.

Under the No Action Alternative, FEMA would not provide funding to relocate the SAP segment of NF Ahtanum (A3000) Road. The road would continue to deliver sediment to Shellneck and NF Ahtanum Creeks, especially during wet periods as described above, and eventually the road would be undermined and washed out. The DNR would continue to maintain and repair the road as necessary but repairs and maintenance would not solve the SAP issue. Traffic on this road segment would continue to exacerbate the sedimentation since the road would not be relocated, until such time that other funding becomes available for relocation in accordance with the Forest Practices program.

For the reasons described above, the No Action Alternative does not meet the project objectives identified in Section 2 of this EA (see Table 1).

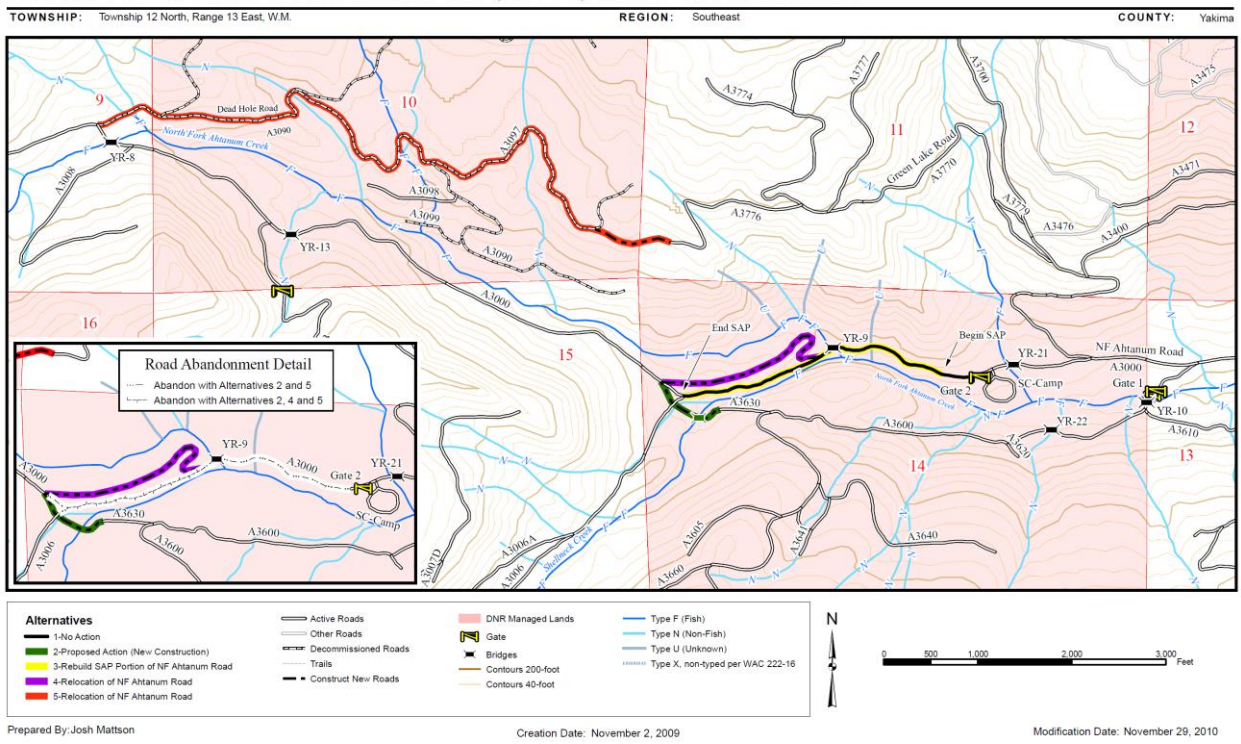
3.2 ALTERNATIVE 2 – PROPOSED ACTION (THE PREFERRED ALTERNATIVE)

The Proposed Action would abandon the SAP segment (approximately 3,720 feet) of NF Ahtanum (A3000) Road beginning west of Snow Cabins Campground (shown as "Begin SAP" on Figure 2) westerly to near the west line of Section 14 (shown as "End SAP" on Figure 2). The relocation would re-route traffic to the existing A3600 Road (at its intersection with A3000 Road) and a short segment of A3630 Road. The A3600/A3630 Road route begins at the east line of Section 14 and runs (for approximately 4,500 feet) on the south side of a ridge separating A3600 Road from NF Ahtanum Creek. A new route would then be constructed to cross Shellneck Creek and rejoin with A3000.

A 45-foot long modular steel bridge would be constructed over Shellneck Creek near the west line of Section 14. Few trees exist on the banks near the crossing, and only two (24-inch diameter at breast height (DBH) spruce) would be removed at the location of the east abutment of the proposed bridge. The bridge would be set on pre-cast concrete abutments and the steel on the bridge would be weathering steel so painting would not be required. The bridge would pass the 100-year flow with 9 feet of freeboard, and would provide a hydraulic opening nearly twice the bankfull width of the existing channel. Bridge abutments would be well away from the stream banks, which pass the 100-year flow without overtopping. Grade sags would be installed no further than 150 feet from the new bridge to shed road surface water. Runoff would be diverted away from streams and to the forest floor to infiltrate.

Eight hundred fifty-five (855) feet of road would be constructed to connect A3000 and A3600 Roads at the ends of the 45-foot bridge, for a total new construction length of 900 feet. The road would be 20 feet wide, with clearing limits averaging 40 feet in width, for construction.

FIGURE 2 - NORTH FORK AHTANUM (A3000) ROAD RELOCATION



Merchantable timber would be sold, and other vegetation would be scattered on the abandoned road and surrounding areas as a secondary means of slowing surface water runoff.

The road would have a 6-inch depth of 1 ¼-inch crushed rock placed for 200 feet on each side of the bridge approaches. In locations where the road has ditches, cross drains would divert surface runoff to the forest floor to minimize sediment delivery. Road construction would require approximately 2,900 cubic yards of excavation and 2,700 cubic yards of embankment (fill), to be performed with a tracked excavator and/or bulldozer, and dump trucks. A location of approximately 100' by 10' will be used for a turnout at the junction of A3000 and A3006 Roads, and will be used for placing any excavated soils until construction is complete (within one month).

Public access would continue to be allowed through the DNR's Green Dot Road Management System. Gates 1 and 2 (as described on page 3-1 and shown on Figure 2) will be used to control public access to the upper reaches of the NF Ahtanum drainage. Gate 1 is currently closed and will be opened after construction, while Gate 2 is closed only seasonally and will be permanently closed after construction.

CONSTRUCTION

Staging for vehicles, equipment and materials would utilize turnouts and the existing A3600 Road.

It is anticipated that construction would take approximately 4 weeks and be conducted during the dry summer operating season, which generally begins mid-July. Following is a breakdown of the general tasks and durations:

Task	Estimated duration (working days)
Mobilization	2 days
Clear and grub	2 days
Excavation and embankment to bridge approaches	4 days
Install cross drain culverts and over-flow relief culvert	1 day
Moving bridge materials to site	2 days
Preparation of site for abutment installation	1 day
Installation of bridge abutments	1 day
Installation of bridge	1 day
Backfilling of bridge approaches	2 days
Placement of crushed rock surfacing at bridge approaches & placement of approach armoring	1 day
Site clean-up	1 day
De-mobilization	2 day
TOTAL	20 days

MITIGATION

As described under the Proposed Action, the project includes abandonment of the SAP segment of NF Ahtanum (A3000) Road to mitigate on-going sedimentation to Shellneck and NF Ahtanum Creeks. A 45-foot long modular bridge would be installed over Shellneck Creek to re-route traffic. The bridge structure was designed and approved by representatives of the signatory agencies of the Timber, Fish & Wildlife (TFW) agreement, comprised of the DNR Forest Practices Division, Washington State Department of Fish & Wildlife (WDFW), Washington

State Department of Ecology (Ecology), and the Yakama Nation. Potential sediment delivery issues have been mitigated in the design by the placement of drainage structures and the shape of the road surface, as well as surfacing of the road at the approaches to the bridge structure.

Section 14 (in which the project is located) includes spotted owl dispersal habitat. Spotted owl is a threatened species under the Endangered Species Act (ESA). In addition, Shellneck and NF Ahtanum Creeks provide habitat to bull trout, and bull trout is a threatened species under the ESA (see Section 4.7 of this EA for additional information regarding these species).

To address these issues, the following mitigation measures will be employed and are included as part of the Proposed Action (additional mitigation measures may be identified as conditions of permits and approvals by agencies with jurisdiction):

Resource Area	Mitigation
General Considerations	The construction zones and clearing limits are the minimum required and will be clearly identified on the ground. No machinery or equipment will access areas outside the construction limits. All mitigation measures will be clearly stated in the construction specifications.
Vegetation	Trees beyond the clearing zone will not be removed or damaged.
Water Quality and Soils	Construction activities will take place in the dry summer months. All disturbed ground will be reclaimed using appropriate best management practices (BMPs). Until the soil is stable, the measures described below will be implemented to prevent sediment from reaching streams. Best management erosion control practices for drainage and sediment control will be implemented to prevent or reduce nonpoint source pollution and minimize soil loss and sedimentation in drainage areas. These practices may include, but are not limited to, silt fencing, filter fabric, check dams and seeding/mulching of exposed areas. Regular site inspections will be conducted to ensure that erosion-control measures are properly installed and functioning effectively. A spill prevention control and countermeasures plan will be developed through the construction contract. Hazardous spill clean-up materials will be on-site at all times. Access from both sides of the bridge installation site will eliminate the need for water crossings with heavy equipment.

	There will be no in-water construction, and abutment fills will be above the 100-year flood level.
Special Status Species	Tree and brush clearing will avoid nesting season for migratory birds of April 1st to July 31st. The Proposed Action is subject to the DNR's State Trust Lands Habitat Conservation Plan (HCP) for Spotted Owl, the Forest Practices Habitat Conservation Plan (FPHCP) for the DNR Forested Practices Division as well as the Forest Practices Rules (FPR) (Washington Administrative Code (WAC) 222), and Road Maintenance and Abandonment Plan (RMAP) (WAC 222-24). Designated Critical Habitat for spotted owl occurs approximately 2 miles from the project area. The project area is considered spotted owl dispersal habitat (non-nesting habitat, non-Critical Habitat). To avoid and minimize impacts to dispersal habitat, the clearing limits have been minimized through the road design. Clearing limits for construction are marked in the field. In designing and carrying out the project, the DNR will comply with applicable provisions of the HCP. Shellneck Creek is known spawning and rearing habitat for bull trout. Juvenile bull trout may occur year-round in Shellneck Creek. Above the confluence with Shellneck Creek, NF Ahtanum Creek is bull trout rearing habitat. Downstream of the confluence with Shellneck Creek, NF Ahtanum Creek is bull trout spawning and rearing habitat through the project area. Shellneck and NF Ahtanum Creeks are also designated Critical Habitat for bull trout. Downstream of the project area, Mid-Columbia River steelhead (MC steelhead) are presumed to occur to approximately the confluence of Shellneck and NF Ahtanum Creeks, although SalmonScape identifies a complete fish passage barrier downstream of this location. Although steelhead are unlikely to occur in the project area, the project area falls within the National Marine Fisheries Service (NMFS) designated Critical Habitat for MC steelhead. Timing restrictions for the bridge construction are specified in the Hydraulic Project Approval (HPA) issued by the WDFW. Bridge construction is permitted to occur between July 15th and August 31st to avoid and minimize potential impacts to spawning bull trout in Shellneck Creek. In designing and carrying out the project, the DNR will comply with applicable provisions of the FPHCP, the Washington Forest Practices Board Manual, and the Forest Practices Board Manual and Abandonment Plan.

3.3 OTHER ALTERNATIVES CONSIDERED AND NOT CARRIED FORWARD

Three other alternatives associated with relocating the SAP segment of NF Ahtanum (A3000) Road were reviewed. These alternatives, described below, were considered but were dropped from further review because the alternatives did not meet the project objectives (described in Section 2 of this EA and Table 1 at the end of this section) and resulted in greater environmental impacts than the Preferred Alternative.

3.3.1 ALTERNATIVE 3 – REBUILD SAP SEGMENT OF NF AHTANUM (A3000) ROAD

This alternative would rebuild the surface and drainage of the existing road where it is SAP. Drainage would include the installation of roll dips which, because of topography, would require discharge to NF Ahtanum Creek in some places. The road surface would require the addition of 6 inches of 1 ¼-inch crushed rock for surfacing. The location where the road is being undermined by the NF Ahtanum Creek would be armored. Maintenance activities and related costs would be increased as well due to the need for a more frequent maintenance cycle to help reduce road surface sediment delivery. In addition, the existing bridge sills on the bridge (YR-9) over NF Ahtanum Creek would have to be replaced in the near future because they are decaying. Based upon review by the TFW representatives, this option is not viable since it cannot effectively mitigate the potential for road surface sediments entering NF Ahtanum Creek. Also, on-going traffic would continue to impact the creek and bull trout habitat.

The factors discussed above make the potential environmental impacts and costs of this alternative far greater than the Preferred Alternative. This alternative does not meet the project objectives discussed in Section 2 of this EA (see Table1).

3.3.2 ALTERNATIVE 4 – RELOCATION OF NF AHTANUM ROAD FROM NF AHTANUM CREEK CROSSING TO WEST SECTION LINE OF SECTION 14

Under this alternative, the route would begin at the bridge (YR-9) over NF Ahtanum Creek and switchback up the spur ridge to the north and west, where it would then run westerly to approximately the west line of Section 14. This route would require approximately 1,400 feet of new construction where the road grades are approximately 15% and the route crosses 50%-plus side slopes. This alternative is not preferred due to the potential for impacts to both Shellneck and NF Ahtanum Creeks. This alternative is also not preferred due to greater road maintenance impacts and cost since a segment of the NF Ahtanum (A3000) Road would remain SAP east of the existing bridge (YR-9) crossing over NF Ahtanum Creek and would continue to incur maintenance costs. More frequent maintenance would be required for the new construction segment due to steeper road grades and side slopes than under the Preferred Alternative. In addition, the existing bridge sills on the bridge over NF Ahtanum Creek would have to be

replaced in the near future since they are decaying. Also, on-going traffic impacts would continue, similar to under the No Action Alternative.

The factors discussed above make the potential environmental impacts and costs of this alternative far greater than the Preferred Alternative. This alternative does not meet the project objectives discussed in Section 2 of this EA (see Table 1).

3.3.3 ALTERNATIVE 5 – RELOCATION OF NF AHTANUM ROAD TO GREEN LAKE ROAD AND TIE INTO DEAD HOLE ROAD SYSTEM

This alternative would relocate the SAP segment of NF Ahtanum (A3000) Road using the existing road in Section 11 of Township 12 North, Range 13 East, W.M. toward Green Lake, and then constructing a tie road into the decommissioned road system in Section 10 of Township 12 North, Range 13 East, W.M. (Dead Hole Road). This alternative would require a substantial amount of reconstruction as well as new construction. There are numerous fish bearing waters that would be crossed in Section 10. The roads in Section 10 have been decommissioned by the DNR and would take considerable work to bring up to a usable standard. Public use impacts would most likely increase due to the increase in area that the public would be able to access, as well as the increase in miles of road. There is also the potential for more impact to water quality due to the increased number of crossings of fish-bearing streams. Due to the amount of new construction and reconstruction, this alternative was not carried any further than an initial evaluation.

The potential environmental impacts associated with this alternative are much greater than the Preferred Alternative and result in the conclusion that this alternative does not meet the project objectives discussed in Section 2 of this EA (see Table 1).

TABLE 1: SUMMARY OF ALTERNATIVES, IMPACTS, AND PROJECT OBJECTIVES

Alternative	**Access to all Parcels**	**Reduce SAP Roads**	**Avoid Unstable Areas or Steep Grades**	**Length of Construction & Maintenance Impacts**	**Erosion & Sedimentation Impacts to Creek and Bull Trout Habitat**	**Public Impacts to Creek & Bull Trout Habitat**	**Emergency Response**
1 - No Action	Temporary as failure is likely	No reduction in SAP segment of NF Ahtanum Rd.	15% road grade	3,720' of maintenance.	On-going erosion & sediment delivery would continue.	Recreation & vehicular impacts would continue.	Road failure/closure would prevent access via the SAP road.
2 – Proposed Action. Abandon SAP segment of NF Ahtanum Rd & construct new segment.	Permanent	Eliminates SAP segment of NF Ahtanum Rd.	None	900' of new construction & maintenance. Less impacts to creeks than other alternatives.	On-going erosion & sediment delivery would be reduced more than the other alternatives.	Less impacts to creek than the other alternatives.	Response time would be about the same as it is currently.
3 – Rebuild NF Ahtanum Rd in SAP segment	Temporary as failure is likely	No reduction in SAP segment of NF Ahtanum Rd.	15% road grade	3,720' of re-construction & maintenance.	On-going erosion & sediment delivery would continue, but less than Alt. 1	Recreation & vehicular impacts would continue.	Response time would be the same until road failure.
4- Combination of existing SAP road and new construction	Permanent	Eliminates half of SAP segment of NF Ahtanum Rd.	15% road grade with some areas of steep side slope.	3,200' of maintenance, of which 1,400' would be new construction.	On-going erosion & sediment delivery would continue, but less than Alt. 1	Recreation & vehicular impacts would continue on remaining segment of SAP road.	Response time would be about the same as it is currently.

Alternative	Access to all Parcels	Reduce SAP Roads	Avoid Unstable Areas or Steep Grades	Length of Construction & Maintenance Impacts	Erosion & Sedimentation Impacts to Creek and Bull Trout Habitat	Public Impacts to Creek & Bull Trout Habitat	Emergency Response
5 - Combination of decommissioned and active logging roads	Permanent	Eliminates SAP Segment of NF Ahtanum Rd.	Rebuild 3 miles of moderately steep (10-15%) grade with some areas of steep side slopes.	3 miles of new construction & maintenance impacts. More new water crossings (5) than other alternatives	On-going erosion & sediment delivery would be reduced more than the other alternatives, except Alt. 2. New impacts to fish-bearing creeks would be greater than other alternatives.	Less impacts to creek than other alternatives, except Alternative 2.	Response time would be double the current emergency response time.

After comparing the potential impacts from construction of the various alternatives, Alternative 2 (the Preferred Alternative/Proposed Action) is also the environmentally preferred alternative because this alternative is least likely to impact resources, primarily water and bull trout habitat. This alternative also avoids steep grades and unstable slopes, and mitigates current stream adjacent parallel (SAP) road impacts. It also is the most cost effective alternative. Emergency response time would also be about the same under the Proposed Action as it is currently.

This section discusses the existing condition of affected resources and the potential effects of the No Action and Proposed Action alternatives.

4.1 CLIMATE AND CLIMATE CHANGE

The U.S. Global Change Research Program website provides observations of trends in climate change. According to the website, the Pacific Northwest region has grown warmer and wetter over the 20th century with annual average temperature increasing 1ºF to 3ºF. Annual precipitation has increased across the region by 10% on average. These variations in the region's climate show clear correlations with two large-scale patterns of climate variation over the Pacific: the El Niño/Southern Oscillation (ENSO) on scales of a few years; and the more recently discovered Pacific Decadal Oscillation (PDO) on scales of a few decades. The observed effects of these patterns provide powerful illustrations of regional sensitivities to climate, but how they might interact with future climate change is not yet understood.

Model scenarios project regional warming in the 21st century to be much greater than observed during the 20th century, with average warming over the region of about 3ºF by the 2030s and 5ºF by the 2050s. Through 2050, average precipitation is projected to increase, although some locations have small decreases.

Project Area Climate

The project area is in the western portion of the Yakima River basin, which is heavily influenced by the presence of the Cascade Range. The Cascades intercept moist air from the Pacific and the Cascade crest receives substantial precipitation. In contrast, the lower areas of the Yakima Basin are relatively arid. Mean annual precipitation ranges from less than 10 inches near the mouth of the Yakima River to about 45 to 60 inches in the project area. Approximately 60 to 80 percent of annual precipitation occurs from October to March. Runoff is derived mostly from winter precipitation in the Cascade Mountains, much of which is stored as snowpack and becomes runoff in the spring and early summer. Air temperature varies significantly from the mountainous areas along the Cascade Range to the low elevations at the mouth of the Yakima River.

Generally, hydrologic models indicate that climate change during the 21st century is expected to result in earlier snowmelt runoff, and reduced summer flows in the Yakima River basin (Vano, et al. 2010). Because climate change is expected to cause continued decline in snowpack and earlier snowmelt resulting in reduced water supplies, a major focus of reports on climate change for the area is the potential increase in water shortages. The Yakima River basin depends on water to support its agriculture and other uses, and the basin contains the largest agricultural economy in the state (U.S. Bureau of Reclamation 2002).

Climate Change and Agency Guidance

The CEQ has issued draft guidance for federal agencies in their consideration of the effects on greenhouse gas emissions and climate change in NEPA documentation (CEQ 2010).

Governor Gregoire committed Washington State to preparing for and adapting to the impacts of climate change as part of Executive Order 07-02. A focus sheet entitled "Preparing for Impacts" is available from Ecology's website (Ecology 2008).

4.1.1 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, FEMA would not provide funding to relocate the SAP segment of NF Ahtanum (A3000) Road, the project would not go forward, and there would not be potential to add the project's incremental effect on climate.

Alternative 2 – Proposed Action

The Proposed Action, to relocate the SAP segment of NF Ahtanum (A3000) Road by re-routing traffic to an existing road (A3600), would provide greater resilience and function for the creek and road system in the face of potential effects caused by climate change. The SAP segment of road would be abandoned and rehabilitated and reduce the potential for road failure and sedimentation to NF Ahtanum Creek.

Relocating the SAP segment of road would not increase vehicle trips and would not increase the present level of contribution to greenhouse gas production. Construction activities would result in short-term emissions from equipment operation and worker transportation, which would represent a negligible contribution to greenhouse gas emissions.

4.2 GEOLOGY AND SOILS

The Ahtanum State Forest is characterized by a number of east-west trending ridges that rise in elevation to the west toward the Cascade crest. The SAP segment of NF Ahtanum (A3000) Road parallels the north side of NF Ahtanum Creek in a ravine between east-west trending ridges. The project road alignment begins at approximately 4,500 feet in elevation and rises to approximately 5,000 feet in elevation near the new bridge location across Shellneck Creek (see Figure 2).

A geology field investigation (WDNR 2004) indicates the project area is located in an area of numerous large ancient landslides, however, the landslides are not currently active and construction activities would not cause slope instability with best practices road engineering.

The report was prepared for Alternative 4, however, which entails new road construction along a ridge, while the Proposed Action does not entail new road construction on ridges or across the toe of slopes and is in a relatively flat area. The 855 feet of new road construction would connect existing roads (A3000 and A3600) to each end of the proposed bridge over Shellneck Creek.

The soil in the area of the Proposed Action is mapped as Naxing loam and Naxing stony loam by the U.S. Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey. Loam is defined as soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Channel Migration Zone

The DNR completed an analysis of the NF Ahtanum Creek watershed that concludes there is no channel migration zone in the project area (WDNR 1998). The lack of an active channel migration zone was confirmed in the field by DNR. During field inspections, a shallow depression was found west of the proposed Shellneck Creek bridge crossing. This depression did not have evidence of active stream use and was significantly higher than the active stream channel. The depression has been identified as an historic overflow swale, not a channel migration zone, in accordance with the Forest Practices Board Manual, Section 2 (Figure 14 of the Board Manual). No impacts to a channel migration zone would occur, as no channel migration zone occurs in the area.

4.2.1 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, FEMA would not provide funding to relocate the SAP segment of NF Ahtanum (A3000) Road. The road would continue to deliver sediment to Shellneck and NF Ahtanum Creeks, especially during wet periods as described in Section 3.1 of this EA, and eventually the road would be undermined and washed out. The DNR would continue to maintain and repair the road as possible but repairs and maintenance would not solve the SAP issue. Traffic would continue to exacerbate the sedimentation since the road would not be relocated, as compared with the Preferred Alternative that includes use of existing gates (Gates 1 and 2) to control and re-route traffic via A3600 Road and abandon the SAP road.

Alternative 2 – Proposed Action

The Proposed Action to relocate NF Ahtanum (A3000) Road would result in less soil impacts than other alternatives as this alternative entails less construction and avoids steep slopes. It would also stop current soil loss that would continue to take place under the No Action Alternative. Soil impacts from road construction would be short-term and have minor ground-

disturbing activities based on the design of the road and use of a relatively flat location. In addition, best management practices (BMPs) for erosion control, as described under Mitigation in Section 3.2 of this EA, would be followed.

4.3 VEGETATION

The combination of the rain shadow east of the Cascade Mountains and elevation-controlled temperatures result in varied vegetative conditions in the project area. Higher elevations (5,000 to 7,000 feet) tend to be cool and moist. These elevations receive 45 to 60 inches of annual precipitation and support a plant community of white-bark pine, subalpine fir, Englemann spruce, and lodgepole pine. Intermediate elevations (3,500 to 5,000 feet) receive 35 to 45 inches of precipitation and host Douglas fir, grand fir, western larch, and white pine (WDNR 2010a).

The project road (A3000, A3600, A3630, and A3006) segments and bridge locations range between 4,500 and 5,000 feet in elevation and, therefore, cross areas having intermediate and high elevation vegetation comprised of mixed stands of the tree species listed above. The area is characteristic of second growth forest with scattered large trees (some up to 30-inches DBH) and snags. Understory consists of bear grass, currant, kinnikinnik, Oregon grape and lupine.

The DNR's Forest Practices Habitat Conservation Plan identifies riparian management zones or RMZs for Type S and Type F waters. The core zone is closest to a stream, followed by an inner zone, and an outer zone. In eastern Washington, the core zone is 30 feet from the edge of the bankfull width (which is 20 feet at the Shellneck Creek bridge crossing), and the inner zone is 70 feet from the edge of the core zone. There is no outer zone at this location because the site is classified by DNR as "marginal forest production." Therefore, the RMZ is 100 feet from either side of Shellneck Creek's bankfull width. The riparian habitat in the RMZ is also second growth forest.

Lists of federally endangered and threatened plant species with the potential to occur in Yakima County were obtained from the U.S. Fish and Wildlife Service (USFWS). No site specific occurrences of listed species are documented in the project area in the Washington Natural Heritage database. Therefore the Proposed Action will not affect listed plant species.

4.3.1 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, construction of a new road segment would not take place and vegetation would not be removed.

Alternative 2 – Proposed Action

The Proposed Action would result in the removal of approximately 0.8 acre of second growth forest habitat based upon an 855-foot long and 40-foot wide clearing zone for the road. Approximately 3,870 feet of road would be abandoned, resulting in a net loss of roadway of 3,015 feet and a net gain in 2.8 acres of forest as trees and shrubs grow and mature in the abandoned roads.

The proposed bridge over Shellneck Creek would require the removal of two spruce that are 24-inches DBH at the east bank abutment. Road approaches that would be constructed to connect either side of the bridge to A3000 and A3630/A3600 Roads would remove second growth forest in the RMZ within 100 feet on either side of the stream bankfull width. Construction of the bridge at Shellneck Creek would allow for abandonment of the SAP segment (which is defined as being in the RMZ) along NF Ahtanum Creek, and removal of the SAP segment from the RMZ of NF Ahtanum Creek (3,720 feet) will more than compensate for vegetation that is removed in the RMZ of Shellneck Creek (200 feet). Once abandoned, the SAP segment of NF Ahtanum (A3000) Road will revegetate, and provide additional shade to NF Ahtanum Creek.

4.4 WATER RESOURCES

The project area is located in the Ahtanum Watershed, and the North Fork Ahtanum Watershed Sub-basin in Water Resource Inventory Area (WRIA) 37. The project location is also within the Yakima River basin, which drains the east slope of the central Cascade Mountains (Lower Yakima Watershed, USGS Catalog Unit 17030003). Elevations for the SAP segment of NF Ahtanum (A3000) Road range from 4,500 to 5,000 feet. Runoff is derived mostly from winter precipitation in the Cascade Mountains, much of which is stored as snowpack and becomes runoff in the spring and early summer. Snow depths range from 19 feet on the summit of Darland Mountain to 3 feet at Ahtanum Meadows (WDNR 2010a).

Shellneck and NF Ahtanum Creeks are perennial, high-gradient mountain streams that flow generally from west to east in the Ahtanum State Forest and drain to Ahtanum Creek, which eventually drains to the Yakima River. Shellneck and NF Ahtanum Creeks are located at the far northwest corner of WRIA 37. The FPHCP and WAC 222-16-030, define Shellneck and NF Ahtanum Creeks as Type F, fish bearing streams.

Bankfull width at the proposed bridge crossing of Shellneck Creek is 20 feet. According to WAC 220-110-070(1)(e), the bridge shall be constructed to pass the 100-year peak flow with consideration of debris likely to be encountered. The DNR has designed the proposed bridge to pass the 100-year event (150 cfs) with 9 feet of freeboard. This flow quantity was calculated using the StreamStats program, which utilizes the regression equations from the 1998 USGS publication "Magnitude and Frequency of Floods in Washington." The freeboard height is the

vertical distance from the bottom of the bridge to the 100-year flood elevation. The flood elevation was calculated using the Manning's Flow Equation for the 100-year flow at the proposed bridge crossing. Manning's Flow Equation determines flow heights, which takes into account the stream width, depth, slope and other stream characteristics. The equation was used again to calculate the expected flow before the stream overtops its bank (275 cfs). Timber Fish & Wildlife and USFWS agreed that the stream did not appear to move woody debris. However, sufficient freeboard is provided to pass woody debris if necessary (WDNR Forest Practices Habitat Conservation Plan).

A search of Ecology's Water Quality website for WRIA 37 did not find water quality data for the project location as reported monitoring stations were farther downstream (one was located about 5-6 miles downstream of the project site on NF Ahtanum Creek and the other monitoring stations were on Ahtanum Creek). However, the creeks provide habitat for bull trout in large part because water in the creeks runs cold and clear. On-going impacts to water quality of the creeks result from sedimentation from the SAP segment of NF Ahtanum (A3000) Road and impacts from vehicular access to the creek.

4.4.1 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, FEMA would not provide funding to relocate the SAP segment of NF Ahtanum (A3000) Road. The road would continue to deliver sediment to Shellneck and NF Ahtanum Creeks, especially during wet periods as described in Section 3.1 of this EA, and eventually the road would be undermined and washed out. The DNR would continue to maintain and repair the road as possible but repairs and maintenance would not solve the SAP issue. Traffic would continue to exacerbate the sedimentation, and pollutants generated by vehicles would also continue to enter the creek since the road would not be relocated, as compared with the Preferred Alternative that includes use of existing gates (Gates 1 and 2) to control and re-route public access via A3600 Road and abandon the SAP road.

Alternative 2 – Proposed Action

The use of an existing road (A3600) instead of the SAP segment of NF Ahtanum (A3000) Road, construction of 855 feet of new road, and placement of a new bridge are proposed so that the SAP road can be abandoned, ultimately improving the water quality and stream habitat quality of NF Ahtanum Creek. Stormwater runoff would be collected in roadside ditches and diverted through cross culverts onto the forest floor where the stormwater would infiltrate. No in-water work would occur, and the 45-foot long modular steel bridge would span the creek. The new bridge crossing would pass the 100-year flow with 9 feet of freeboard. Bridge abutments would be placed well away from the stream banks, which pass the 100-year flow without overtopping.

The crossing (the proposed bridge) of Shellneck Creek would be perpendicular to the stream. Hydrologic flow paths in this project would not be altered, and no rerouting of water would occur.

Short term sedimentation impacts to water quality would take place during construction of the 855 feet of new road, placement of the modular bridge over Shellneck Creek, and abandonment and rehabilitation of the SAP segment of NF Ahtanum (A3000) Road. The project has been designed to mitigate potential impacts to the maximum extent in coordination with the TFW agency representatives, and includes the goals, provisions, and BMPs of the HCP, FPHCP, FPR, and RMAP (see Mitigation in Section 3.2 of this EA). The Forest Practices Rules protecting water quality are jointly adopted by the Washington Forest Practices Board and the Washington Department of Ecology (WDNR 2009).

4.5 FLOODPLAINS (EO 11988)

EO 11988, Floodplain Management, requires federal agencies to reduce the risk of flood loss, minimize the impact on human health, safety, and welfare, and restore the natural and beneficial values served by floodplains. Under FEMA's implementing regulations at 44 CFR Part 9, FEMA must evaluate the potential effects of any actions it may take in a floodplain and consider alternatives to avoid adverse effects. Federal agencies are also required under 44 CFR Part 9 to provide public notice and review of plans for actions in floodplains and wetlands. The public notice for this disaster and public review of the draft EA meet FEMA's public notice and review obligations.

FEMA-designated 100-year floodplains have not been mapped in the project area because of its remote location. At the location of the proposed bridge across Shellneck Creek, the DNR has determined that the incised stream channel passes the 100-year flow event without overtopping its banks; i.e. there is no 100-year floodplain in this location (see Section 4.4 Water Resources).

The SAP road segment along the NF Ahtanum Creek is also not mapped as being in a 100-year flood plain along this section of stream. The 100-year flood elevation in this area has not been established.

4.5.1 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, FEMA would not provide funding to relocate the SAP segment of NF Ahtanum (A3000) Road. Although there are no mapped floodplains, the road would continue to deliver sediment and vehicle pollutants to Shellneck and NF Ahtanum Creeks,

especially during wet periods as described in Section 3.1 of this EA. Eventually the road would be undermined and washed out by the creeks, causing water quality impacts.

Alternative 2 – Proposed Action

The Proposed Action incorporates avoidance, minimization, and mitigation measures into the project design and location to meet EO 11988, for example by spanning the stream channel with abutments outside of the streambanks.

The proposed abandonment of the SAP segment of road meets EO 11988 by reducing the potential impacts of future flooding on the road by relocating it away from the stream. The proposed abandonment of the road also meets EO 11988 by reducing potential future impacts of the road on the floodplain by moving the road away from the stream and re-establishing a forested riparian area along the stream.

4.6 WETLANDS (EO 11990)

EO 11990 (Wetlands) requires that federal agencies take action to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial effects of wetlands. Federal agencies, in planning their actions, are required to consider alternatives to wetland sites and limit potential damage if an activity affecting a wetland cannot be avoided. Federal agencies are also required under 44 CFR Part 9 to provide public notice and review of plans for actions in wetlands. The public notice for this disaster and public review of the draft EA meet FEMA's public notice and review obligations.

Based on the National Wetland Inventory and field observations, the No Action and Proposed Action alternatives would not take place in or affect wetlands as there are none in the vicinity.

4.7 FISH AND WILDLIFE

The Proposed Action is subject to the DNR's State Trust Lands Habitat Conservation Plan (HCP) for Spotted Owl, the Forest Practices Habitat Conservation Plan (FPHCP) for the DNR Forested Practices Division as well as the Forest Practices Rules (FPR) (Washington Administrative Code (WAC) 222), and Road Maintenance and Abandonment Plan (RMAP) (WAC 222-24). The new road and bridge are proposed so the SAP road segment can be abandoned, ultimately improving the water quality and stream habitat quality of Shellneck and NF Ahtanum Creek. The Proposed Action is consistent with the strategy, objectives, provisions, and BMPs of the HCP, FPHCP, FPR, and RMAP. The Proposed Action has been developed with input by an interdisciplinary team of the Timber, Fish, and Wildlife (TFW) reviewers from the WDFW, the Yakama Nation, and the Washington Department of Ecology Water Quality Program.

The HCPs were developed within the framework of the Endangered Species Act (ESA) Section 10(a)(1)(B) in consultation with the National Marine Fisheries Service (NMFS) and the US Fish and Wildlife Service (USFWS), collectively known as the Services. The Services have concurred that individual ESA Section 7 consultation by FEMA for disaster-related funding for DNR managed activities covered by the HCPs is not necessary as long as FEMA conditions the grant to comply with conservation measures outlined in the HCPs (NMFS/USFWS June 10, 2004). NMFS also concurs that consultation under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act or MSA) is satisfied by the HCPs.

The HCPs provide a framework for long-term conservation of species. For example, the provisions of the Forest Practices HCP regarding riparian habitat "are intended to be conducted in a manner that will not significantly impair the capacity of aquatic habitat to support harvestable levels of salmonids, support the long-term viability of other covered species, and meet or exceed water quality standards" (FPHCP Section 4). The two HCPs cover not only certain federally threatened and endangered plant and animal species, but also numerous state and/or federal species of concern, candidate species, and state priority species.

The Ahtanum State Forest provides habitat for a diversity of mammal and bird species associated with mountain forests. An estimated 300 species of terrestrial animals inhabit the forest during at least a portion of the year. Primary habitat associations for these species include riparian areas, snags, late-succession forest, wet meadows, caves, cliffs, talus, roadless areas, and native shrubsteppe vegetation (WDNR 2010a).

Most, if not all, terrestrial species that are common to forested areas in this region will be found in or near the project area at some time. The forest provides habitat for a variety of birds and for elk, deer, bear, grouse, coyote, cougar, bobcat, mountain beaver, and other wildlife species. Shellneck and NF Ahtanum Creeks provide habitat for fish and other aquatic species. The Washington Natural Heritage database shows priority habitat for mountain goat and elk occurring outside of the project area, but within a 2-mile radius of the project. These two species are not listed as threatened or endangered under the ESA. The database also shows non-listed westslope cutthroat trout and rainbow trout in Shellneck and NF Ahtanum Creeks.

Migratory Birds

The project area provides habitat for a variety of migratory bird species, including songbirds and birds of prey. The USFWS Office of Migratory Bird Management maintains a list of migratory birds (50 CFR 10.13). The Migratory Bird Treaty Act (MBTA) of 1918, as amended, prohibits the "take" of migratory birds, their active nests, eggs, and parts from harm, sale, or other injurious actions. The applicant is responsible for compliance with the Act's provisions.

Federally Listed Species and Critical Habitat

Lists of federally endangered and threatened species and designated Critical Habitats with the potential to occur in Yakima County were obtained from the U.S. Fish and Wildlife Service (USFWS) database. Of the listed species and habitats that could occur in Yakima County, the following occur or are likely to occur within the project area as documented on the WDFW SalmonScape website and in the Washington Natural Heritage database: bull trout, designated bull trout Critical Habitat, designated MC steelhead critical habitat, and spotted owl dispersal habitat**.**

Fish Species

Juvenile bull trout may occur in the project area year-round (USFWS Personal Communication 2010). SalmonScape shows NF Ahtanum Creek above the confluence with Shellneck Creek as bull trout rearing, but not spawning habitat. Shellneck Creek and NF Ahtanum Creek below the confluence with Shellneck Creek are both considered bull trout spawning habitat. Designated Critical Habitat for bull trout occurs within, upstream, and downstream of the project area.

Downstream of the project area, Mid-Columbia River steelhead (MC steelhead) are presumed to occur to approximately the confluence of NF Ahtanum and Shellneck Creeks, although SalmonScape identifies a complete fish passage barrier downstream of this location. Although MC steelhead are unlikely to occur in the project area, the project area falls within the National Marine Fisheries Service (NMFS) designated Critical Habitat for MC steelhead.

Spotted Owl

The project area is considered spotted owl dispersal habitat (USFWS Personal Communication 2010). Dispersal is the process of young birds leaving their birthplace to find and establish their own breeding habitat or adult birds searching for new breeding territories or wintering grounds. Dispersal habitat "provides protection from the weather and predation, roosting opportunities, and clear space below the forest canopy for flying" (WAC 222-16-085). The Washington Natural Heritage database shows spotted owl territorial priority habitat within the drainage approximately one mile from the project area. Designated Critical Habitat for spotted owl occurs within two miles of the project.

Essential Fish Habitat (EFH)

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act or MSA) requires federal fishery management plans to describe the habitat essential to the fish being managed and describe threats to that habitat from both fishing and non-fishing activities. In addition, in order to protect this Essential Fish Habitat (EFH), federal agencies are required to consult with the NMFS on activities that may adversely affect EFH.

The Pacific Fishery Management Council manages the fisheries for coho, Chinook, and Puget Sound pink salmon and has defined EFH for these three species. Salmon EFH includes all those streams, lakes, ponds, wetlands, and other water bodies currently or historically accessible to salmon in Washington, Oregon, Idaho, and California. Salmon EFH excludes areas upstream of longstanding naturally impassible barriers (i.e. natural waterfalls in existence for several hundred years), but includes aquatic areas above all artificial barriers except specifically named impassible dams.

Shellneck and NF Ahtanum Creeks in this area are not habitat for Chinook or pink salmon. Small, high gradient mountain streams are not characteristic of Chinook and pink salmon habitat. Coho salmon do not occur in the project area, but this species may have historically occurred in the project area, therefore these streams are presumed EFH for coho salmon despite the lack of current use by coho.

4.7.2 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, FEMA would not provide funding to relocate the SAP segment of NF Ahtanum (A3000) Road. The road would continue to deliver sediment to Shellneck and NF Ahtanum Creeks, especially during wet periods as described in Section 3.1 of this EA, and eventually the road would be undermined and washed out. The DNR would continue to maintain and repair the road as possible but repairs and maintenance would not solve the SAP issue.

Sediment delivery to the stream would continue to adversely affect bull trout spawning and rearing in the project area, EFH, and designated Critical Habitat for bull trout and MC steelhead. Traffic would continue to exacerbate the sedimentation since the road would not be relocated. Spotted owl dispersal habitat in the project area would not be changed by the No Action alternative.

Alternative 2 – Proposed Action

Fish and Wildlife

Under the Proposed Action, the SAP road segment would be abandoned and thus the current impacts to the stream and riparian habitat would be avoided. With the reduction of 3,015 feet of roadway, forested habitat would be increased by approximately 2.8 acres over time as the forest regenerates in the former roads. By removing the existing SAP road, the stream and riparian habitat quality in the project area would improve under the Proposed Action. Construction activity and noise may cause temporary displacement of wildlife in the project area to other similar adjoining habitats. At the proposed bridge location, two 24-inch DBH spruce would need to be removed at the east abutment. Removal of the trees would not result in a loss of shade because Shellneck Creek is heavily shaded by tree canopy.

The 855 feet of new road and 45-foot bridge construction across Shellneck Creek would avoid adverse effects to fish and fish habitat with the use of construction and design and BMPs consistent with the Forest Practices Board Manual and the Forest Practices Habitat Conservation Plan. The BMPs include construction timing restrictions and design considerations specifically to avoid impacts to the fish and their habitat. No in-water work would occur, and the bridge would span the creek. The new bridge crossing would pass the 100-year flow with 9 feet of freeboard. Bridge abutments are placed well away from the stream banks, which pass the 100-year flow without overtopping. Fills would be placed above the 100-year flood elevation. No adverse effects to fish or fish habitat are expected to occur in the project area.

Migratory Birds

Under the Preferred Alternative, the potential for construction-related impacts to migratory birds would be avoided or greatly reduced by avoiding vegetation and land clearing activities during the most sensitive portion of the nesting season, which generally occurs from April 1st through July 31st (personal communication, WDFW 2011). Avoiding clearing during this time period avoids or reduces the potential for "take" under the MBTA.

Federally Listed Species and Critical Habitat

Fish Species

The Proposed Action is consistent with the goals, provisions, and BMPs of the HCPs, FPR, and RMAP. This framework provides for long term conservation of covered species and Critical Habitat, including bull trout and steelhead. The project includes specific elements to avoid and/or minimize potential adverse effects to fish and habitat through design and BMPs such as spanning Shellneck Creek with a bridge rather than a culvert, and implementing timing restrictions to avoid working over the water during critical spawning times. By adhering to this framework, no adverse effects to listed fish or Critical Habitat are expected to occur with the project. In addition, by abandoning the SAP segment of NF Ahtanum (A3000) Road and re-routing traffic to A3600 Road, current impacts to fish and fish habitat would be avoided.

Because DNR has stated that the Proposed Action falls within the scope of activities covered by the HCPs, ESA consultation for protection of federally listed species and designated Critical Habitat has already occurred with USFWS and NMFS, and no further consultation is required by FEMA. Carrying out these activities in compliance with the conditions of the HCPs provides compliance with ESA.

Spotted Owl

The project area occurs in spotted owl dispersal habitat. The Preferred Alternative could disturb any spotted owls that might occur in the area during construction activities from noise and human disturbance. Adverse effects are not expected to occur to individual spotted owls as

the disturbance would be short in duration (20 days of construction) and localized to the immediate construction area.

The new road segment would remove 855 feet (or 0.8 acre) of forest habitat. This loss of forest is not expected to result in adverse effects to spotted owls or dispersal habitat because the new road width would be minimized (the clearing limits are marked in the field) and the overall length of roadway in this area would decrease by 3,015 feet (with the abandonment of 3,720 feet of A3000 Road and 150 feet of A3006 Road) for a net increase in forest habitat of 2.8 acres over time as the forest regenerates in the former roadway. The adherence of the project to the State Trust Lands HCP for spotted owls would avoid and/or minimize the potential adverse effect to spotted owls, and contribute to the long term conservation of the species.

Essential Fish Habitat (EFH)

Coho salmon do not occur in the project area, but this species may have historically occurred in the area, therefore Shellneck and NF Ahtanum Creeks are presumed EFH for coho salmon despite the lack of current use by coho. The habitat requirements (i.e. EFH) for the MSA-managed species in the project area are similar to that of the ESA-listed species. Therefore the goals, provisions, and BMPs of the HCPs, FPR, and RMAP also provide for long term conservation of EFH. The project includes specific elements to avoid and /or minimize potential adverse effects to EFH through design and BMPs such as spanning Shellneck Creek with a bridge rather than a culvert.

Because DNR has stated that the Proposed Action falls within the scope of activities covered by the HCPs, no further consultation with NMFS under the MSA is required by FEMA. Carrying out these activities in compliance with the conditions of the HCPs provides compliance with the MSA.

4.8 HISTORIC, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

The general region in which the proposed project is located, the Columbia Basin Plateau, has been occupied by humans for over 11,000 years. Ancestors of the 14 bands and tribes that make up the present-day Yakama Nation utilized a broad spectrum of resources throughout the area, including terrestrial mammals such as deer and elk, fish, and riparian and desert plants. The Yakama peoples used the upper elevations of the Basin (where the project area is located) during the spring and summer months, beginning with collecting edible roots in the spring and ending with harvesting huckleberries before returning to their winter villages along the rivers in the Yakima valley floor (Yakama Nation 2011). Prior to the establishment of the Consolidated Tribes by treaty in 1855, the populations in the area have been described as "small, politically autonomous groups, joined together by bonds of territorial contiguity, linguistic affinity, a common culture, and a high level of recurring social interaction." (Shuster 1998: 327) Euro-American contact with the area began with the Lewis and Clark expedition of 1806 through the

lower reaches of the area. The first permanent white settlements were established before 1850. In the area of the proposed project, the primary development activity throughout the historic period has been, and continues to be, centered on the timber industry.

The National Historic Preservation Act (NHPA) declares federal policy to protect historic sites and values, in cooperation with other nations, states, and local governments. Subsequent amendments designated the State Historic Preservation Officer (SHPO) as the individual responsible for administering state-level programs. Section 106 of the NHPA and its implementing regulations (36 CFR Part 800) outline the procedures to be followed in the documentation, evaluation, and mitigation of impacts to cultural resources. The Section 106 review process applies to any federal undertaking that has the potential to affect any property listed, or eligible for listing, in the National Register of Historic Places (NRHP).

Washington DNR archaeologist, M. Leland Stilson, performed a cultural resources survey of the Area of Potential Effect (APE) of the proposed project in September, 2009. Prior to his field work, he conducted a search of the records of the Washington Department of Archaeology and Historic Preservation, and determined that there are four reported archaeological sites within two miles of the project location, but no reported sites within the APE. As stated above, the general area has long been occupied by the ancestors of the present Yakama Nation. Further research using historic maps of the vicinity show no historic development in the area, except for trails that have become part of the current road system. The field survey revealed numerous indications of past logging activities in the area, but no prehistoric or historic cultural resources were observed. (2010b: 4)

Based on the lack of previously reported sites within the APE, and the negative findings of the field survey, FEMA made a determination of "no historic properties affected" for this project in accordance with 36 CFR 800.4(d)(1). The Washington SHPO concurred with this determination by letter dated January 10, 2011. FEMA solicited additional information or concerns regarding cultural, religious, or historic values from the Yakama Nation by telephone and by letter dated December 28, 2010. The Yakama Nation was also involved in the scoping for this Environmental Assessment, and they will receive the draft for review. To date, no issues have been raised.

4.8.1 Environmental Consequences

Alternative 1 – No Action

Under this alternative, the project would not be funded and there would not be a potential to affect archaeological, cultural, or historical resources.

Alternative 2 – Proposed Action

Under this alternative, based on existing information, there would be no effect to archaeological, cultural, or historical resources. Though unlikely, it is possible that previously undiscovered buried cultural resources may exist within the APE. If any such resources are identified during the construction of this project, work will be halted pending evaluation of the discovery and coordination with the Washington SHPO and the Yakama Nation.

4.9 SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE (EO 12898)

Executive Order (EO) 12898, Environmental Justice, directs federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects on minority and low-income populations in the U.S. resulting from federal programs, policies, and activities. The project, however, is located in a state forest and there are no minority or low-income populations in the Ahtanum State Forest.

4.9.1 Environmental Consequences

Alternative 1 – No Action

Under the No Action Alternative, FEMA would not provide funding to relocate the SAP segment of NF Ahtanum (A3000) Road.

Economic impact to the DNR would be caused by the long-term maintenance costs of the NF Ahtanum (A3000) Road. There would be no disproportionately high and adverse human health or environmental effects on minority and low-income populations because there are none in the Ahtanum State Forest.

Alternative 2 – Proposed Action

Road maintenance costs incurred by the DNR would be reduced under the Proposed Action. The proposed road relocation would not result in disproportionately high and adverse human health or environmental effects on minority and low-income populations because there are none in the Ahtanum State Forest.

CUMULATIVE IMPACTS

Cumulative effects or impacts are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions" (40 CFR 1508.7). Cumulative effects are determined by combining the effects of an action with other past, present, and reasonably foreseeable future actions.

The Ahtanum State Forest is managed for timber harvesting, grazing, and recreational uses. These uses produce various environmental impacts that have been addressed by DNR in environmental documents prepared for proposed management plans (non-project actions) and for project actions. The Proposed Action of relocating the SAP segment of NF Ahtanum (A3000) Road would reduce on-going contributions to cumulative impacts in the Ahtanum State Forest in the resource areas of air quality, water quality, fish and fish habitat, vegetation and forest habitat. The No Action Alternative, in contrast, would result in a continuation of on-going impacts and, therefore, continue to contribute to cumulative impacts to the resources in the forest.

The road relocation (by abandoning the SAP road and re-routing traffic to an existing road) would not result in increased capacity. Approximately 3,720 feet of NF Ahtanum (A3000) Road would no longer receive traffic-related impacts, and A3600/A3630 Roads would receive impacts from traffic that is re-routed from NF Ahtanum (A3000) Road. The contribution of vehicle emissions during construction of 855 feet of new road would not result in a measurable contribution to cumulative impacts on air quality. Current impacts from traffic and sedimentation to Shellneck and NF Ahtanum Creeks would be avoided by eliminating the SAP segment of road, thus reducing on-going cumulative impacts from traffic in the project area.

By removing the SAP road segment, on-going sedimentation to Shellneck and NF Ahtanum Creeks and impacts to water quality, fish and fish habitat would be reduced, thereby reducing current cumulative impacts on those resources. While 0.8 acre of vegetation would be removed by the Proposed Action, due to the limited scope of the work and the proposed mitigation, no loss of sensitive species is expected that would contribute a measurable amount to cumulative effects. The abandoned road segments would be rehabilitated and re-vegetated, resulting in a net increase of approximately 2.8 acres of vegetation and forest habitat.

PUBLIC INVOLVEMENT

FEMA is the lead federal agency for conducting the NEPA compliance process for funding the road relocation project. As the lead agency, FEMA prepares NEPA documents, responds to any public comments, meets the spirit and intent of NEPA, and complies with all NEPA provisions.

FEMA sent a scoping letter to agencies, the Yakama Nation, and local interested parties on November 22, 2010. The letter provided a description of the proposed project and requested comments on the alternatives and potential effects of the project. Four letters were received during scoping and were considered in the preparation of the EA. The Draft EA was available for public review and comment from March 1, 2011 to March 30, 2011. The Draft EA was posted on FEMA's and DNR's websites and e-mailed to 43 recipients. No comment letters were received on the Draft EA.

LIST OF PREPARERS

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Nick Jones, P.E., Region Engineer, Southeast Region, Washington DNR

Josh Mattson, P.E., Assistant Engineer, Southeast Region, Washington DNR

AGENCIES AND PERSONS CONSULTED

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YAKAMA NATION

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Philip Rigdon, Deputy Director, Division of Natural Resources

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Allyson Brooks, State Historic Preservation Officer

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Washington Emergency Management Division (EMD)

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Interested Parties

***Green Dot User Group*:**

Arlene Brooks, Washington State Director, Pacific Northwest 4-Wheel Drive Association

Earl Nettnin, Region 4 Director, Pacific Northwest 4-Wheel Drive Association

Ron Rutherford

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Washington Department of Natural Resources Forest Practices Habitat Conservation Plan http://www.dnr.wa.gov/BusinessPermits/Topics/ForestPracticesHCP/Pages/fp_hcp.aspx

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YAKIMA COUNTY
Updated 5/18/2010

LISTED
Endangered
Gray wolf *(Canis lupus)*

Threatened
Bull trout *(Salvelinus confluentus)* – Columbia River distinct population segment
Grizzly bear *(Ursus arctos horribilis)*
Marbled murrelet *(Brachyramphus marmoratus)*
Northern spotted owl *(Strix occidentalis caurina)*
Ute ladies'-tresses (*Spiranthes diluvialis*), plant

Designated
Critical Habitat for the northern spotted owl

Proposed
Revised Critical Habitat for the bull trout

CANDIDATE
Fisher *(Martes pennanti)* - West Coast distinct population segment
Greater sage grouse *(Centrocercus urophasianus)* – Columbia Basin distinct population segment
Mardon skipper (*Polites mardon*), butterfly
Yellow-billed cuckoo (*Coccyzus americanus*)

SPECIES OF CONCERN
Animals
Bald eagle *(Haliaeetus leucocephalus)* (delisted, monitor status)
Black swift (*Cypseloides niger*)
Burrowing owl *(Athene cunicularia)*
Ferruginous hawk *(Buteo regalis)*
Larch Mountain salamander *(Plethodon larselli)*
Loggerhead shrike *(Lanius ludovicianus)*
Long-eared myotis (*Myotis evotis*)
Northern goshawk *(Accipiter gentilis)*
Olive-sided flycatcher *(Contopus cooperi)*
Pacific lamprey *(Lampetra tridentata)*
Pallid Townsend's big-eared bat *(Corynorhinus townsendii pallescens)*
Peregrine falcon (*Falco peregrinus*) (Delisted, monitor status)
Redband trout (*Oncorhynchus mykiss*)

River lamprey *(Lampetra ayresi)*
Sagebrush lizard *(Sceloporus graciosus)*
Sharptail snake (*Contia tenius*)
Townsend's ground squirrel (*Spermophilis townsendii*)
Western brook lamprey (*Lampetra richardsoni*)
Western gray squirrel *(Sciurus griseus griseus)*
Westslope cutthroat trout *(Oncorhynchus clarki lewisi)*
Wolverine *(Gulo gulo)*

Vascular Plants
Astragalus columbianus, Columbia milk-vetch
Calochortus longebarbatus var. *longebarbatus,* Long-bearded sego lily
Castilleja cryptantha, Obscure indian-paintbrush
Cryptantha leucophaea, Gray cryptantha
Cypripedium fasciculatum, Clustered lady's-slipper
Erigeron basalticus, Basalt daisy
Lomatium tuberosum, Hoover's desert-parsley
Pinus albicaulis, Whitebark pine
Sisyrinchium sarmentosum, Pale blue-eyed grass
Tauschia hooveri, Hoover's tauschia

The following conditions and measures shall be followed:

- The applicant shall obtain all required local, state, and federal permits and approvals prior to implementing the Proposed Action Alternative and comply with any and all conditions imposed. The applicant has already received an Hydraulic Project Approval (HPA) and approved Forest Practices Application (FPA), which are the permits known to be required at this time.
- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other laws and Executive Orders.
- In the event that archaeological or historic materials are discovered during project activities, work will be halted pending evaluation of the discovery and coordination with the Washington SHPO and the Yakama Nation.

STATE OF WASHINGTON

DEPARTMENT OF ARCHAEOLOGY & HISTORIC PRESERVATION

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January 10, 2011

Mr. Mark G. Eberlein
FEMA – Region X
130 – 228th Street SW
Bothell, Washington 98021-9796

RE: A3000 Road Relocation Project
FEMA# *1734-WA-PW-1581*
Log No: 011011-07-FEMA

Dear Mr. Eberlein:

Thank you for contacting our Department. We have reviewed the materials you provided for the proposed A3000 Road Relocation Project in Ahtanum State Forest, Yakima County, Washington.

We concur with the Determination of No Historic Properties Affected.

We would appreciate receiving any correspondence or comments from concerned tribes or other parties that you receive as you consult under the requirements of 36CFR800.4(a)(4).

In the event that archaeological or historic materials are discovered during project activities, work in the immediate vicinity must stop, the area secured, and the concerned tribes and this department notified.

These comments are based on the information available at the time of this review and on the behalf of the State Historic Preservation Officer in conformance with Section 106 of the National Historic Preservation Act and its implementing regulations 36CFR800. Should additional information become available, our assessment may be revised. Thank you for the opportunity to comment and a copy of these comments should be included in subsequent environmental documents.

Sincerely,

Robert G. Whitlam, Ph.D.
State Archaeologist
(360) 586-3080
email: rob.whitlam@dahp.wa.gov

DEPARTMENT OF ARCHAEOLOGY & HISTORIC PRESERVATION

PUBLIC NOTICE (issued March 1, 2011)

Federal Emergency Management Agency
Draft Environmental Assessment
North Fork (NF) Ahtanum (A3000) Road Relocation
Ahtanum State Forest, Yakima County, WA

The U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) proposes to provide funding to Washington State Department of Natural Resources (DNR) for a road relocation project in the Ahtanum State Forest.

FEMA prepared a Draft environmental assessment (EA) for the proposed project pursuant to the National Environmental Policy Act (NEPA) and FEMA's implementing regulations found in 44 Code of Federal Regulations (CFR) Part 10. The Draft EA evaluates project alternatives and compliance with applicable environmental laws and Executive Orders #11990 (Protection of Wetlands), #11988 (Floodplain Management), and #12898 (Environmental Justice). The alternatives evaluated in the EA are the (1) No Action; and (2) the Proposed Action (or Preferred Alternative) toward which FEMA would contribute funding, and 3) Other Alternatives Considered but not carried forward in the analysis.

The proposed action would abandon the stream adjacent parallel (SAP) segment (approximately 3,720 feet in length) of NF Ahtanum (A3000) Road (west of Snow Cabins Campground to approximately the west section line of Section 14, T12N, R13E, W.M.), and re-route traffic to an existing road, A3600 Road, located south of a ridge from NF Ahtanum Creek. Analysis of the environmental impacts associated with the alternatives is further discussed in the EA.

The Draft EA is available for review online at the FEMA environmental website at: http://www.fema.gov/plan/ehp/envdocuments under Region X. If no significant issues are identified during the comment period, FEMA will finalize the EA, issue a Finding of No Significant Impact (FONSI) and fund the project. Unless substantive comments are received, FEMA will not publish another notice for this project. However, should a FONSI be issued, it will be available for public viewing at http://www.fema.gov/plan/ehp/envdocuments under Region X.

The Draft EA is also available for review online at the DNR website: http://www.dnr.wa.gov/ResearchScience/ForestryForestEcology/Pages/Home.aspx. The Draft EA can be viewed in paper form at the DNR's Southeast Region office, 713 Bowers Road Ellensburg, WA 98926.

Written comments on the draft EA should be received no later than 5 pm on March 30, 2011 to Susan King, Environmental Specialist, FEMA Region 10, 130 228th Street SW, Bothell Washington 98021-9796 or by e-mail at susan.king@dhs.gov. Comments can also be faxed to 425-482-3777.